

SA 5: Damage Assessment

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1.0 Introduction

Coordinating Agencies:

- Lewis & Clark County Disaster & Emergency Services (LCCO DES)
- City & County Public Works

Cooperating Agencies:

- All City & County Departments
- American Red Cross (ARC)
- Civil Air Patrol (CAP)
- Capitol City Amateur Radio Club (CCRC)/Amateur Radio Emergency Services (ARES)
- Local Volunteer Organizations (NGOs, CBOs, FBOs, CERT etc.)
- Montana Disaster & Emergency Services (MTDES)
- Montana Department of Transportation (MDT)
- Montana Department of Natural Resources (DNRC)
- Montana Highway Patrol (MHP)

1.1 Purpose

This annex was developed to describe the concepts, organizations, and responsibilities applied to the rapid and effective assessment of damage following an emergency situation or natural disaster in Lewis & Clark County. It is not intended to define Standard Operating Procedures/Guidelines (SOP/SOG) for any particular agency, but to provide a framework for operations in the event of mutual aid between agencies.

1.2 Scope

This annex applies to local government entities in Lewis & Clark County and the incorporated cities of Helena & East Helena.

1.3 ESF Activation & Plan Maintenance

This annex may be activated independently or in conjunction with other Annexes, depending on the needs of the situation.

The primary responsibility for development and maintenance of this annex is that of LCCO DES with support from all supporting agencies and departments.

This annex should be reviewed and revised annually, unless significant changes warrant earlier revision. Continued and regular revision and updating should keep this document valid and useful. Regular testing and exercising should establish the groundwork for efficient and expeditious delivery of assistance in times of emergency or disaster.

1.4 Policies

- ❖ This annex is effective upon approval.
- ❖ The Commissioners have the authority to declare a State of Emergency within their jurisdictions and the responsibility to request a state or federal declaration if appropriate. *Requests for State or Federal assistance must go through the DESC.*
- ❖ It is the policy of Lewis & Clark County governments/jurisdictions that each jurisdiction develop the capability to ascertain after a disaster or other major event what has happened to departmental personnel, facilities, equipment, and service delivery capability, what can be done about the situation with existing resources, and what specific needs exist to maintain or re-establish agency capabilities or to respond to the situation. This information should be relayed to the appropriate Emergency Operations Center as soon as possible after an event.

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- ❖ It is further the policy that each department document costs of emergency operations and damages to government property and facilities in anticipation of potential Federal reimbursement under established disaster relief and recovery programs.
- ❖ Local officials have the authority to condemn buildings as unsafe to occupy.
- ❖ State, County, or City law enforcement agencies working in conjunction with the MDT and County Roads Department can enforce the closure of roads and rerouting of traffic if necessary.
- ❖ All organizations are responsible for the development and maintenance of their own internal guidelines, plans and notification procedures. No part of this annex is intended to supplant agency SOP/SOGs.

2.0 Situation & Assumptions

2.1 Situation

- ❖ Lewis & Clark County has the potential to experience damages caused by a major emergency/disaster.
- ❖ A disaster, regardless of hazard, requires an accurate assessment of the actual effect on population and property. Such an assessment defines the severity and magnitude of loss and directs attention to the mobilization of human and material resources necessary to cope with the situation. Additionally, any county or city assistance request must be based on a firm, aggregate community damage/loss estimate.
- ❖ There are diverse groups, both public and private that may assess damage following a disaster. These groups include the American Red Cross, City & County Public Works and Building departments, law enforcement, fire departments, utilities companies, and the Civil Air Patrol.
- ❖ The Helena Building Department contracts with East Helena for building inspection. There are no building codes for the county, except for electrical and plumbing which are enforced by the state.

2.2 Assumptions

- ❖ Even during disasters and emergencies, there is an expectation by the public that government will continue to provide its normal services.
- ❖ Those services that directly impact the preservation of life, property, and the environment will be given the highest priorities for receiving resources.
- ❖ An organized and coordinated damage assessment performed by teams will provide the EOC and chief decision-makers with the information necessary to respond to and recover from, the disaster.
- ❖ Local Government may be competing with business industry and the public in general, for limited resources after a disaster which could delay the recovery of local services.

3.0 Concept of Operations

3.1 General

- ❖ Damage assessment in Lewis & Clark County is designed to rapidly determine the extent of damage, to provide accurate information to County authorities, and to support and expedite requests for State or Federal assistance.
- ❖ As a rule, damage assessment should begin as soon as practical, either during or immediately following an emergency or disaster. Damage assessment should be coordinated with the EOC.
- ❖ Damage Assessment Teams (DAT) should consist primarily of local government employees who possess the necessary expertise. When necessary, state employees or private sector personnel from the fields of engineering, building trades, property assessment, and other related areas may be used to supplement existing team members.
- ❖ When an operation, such as a hazardous material accident, is in need of specialized assistance, appropriate personnel should be added to the teams.

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- ❖ Depending on the magnitude of the situation, Montana Disaster & Emergency Services may provide assistance in developing damage assessment reports that support requests for disaster declarations.
- ❖ Overall assessment practices should follow accepted procedures/guidelines and protocols.

Direction & Control

- ❖ Damage assessment usually takes place in two phases:
 - ♦ **Phase I: Initial Assessment-** The initial assessment, to determine general impact and damage to vital facilities and resources, and provide a brief overview of impact on citizens and businesses; and
 - ♦ **Phase II: Secondary Assessment-** Subsequent, in-depth, assessments to determine the full extent of damage and the financial implications for disaster declarations and disaster assistance. Priorities in the initial assessment should be the restoration of emergency response and direction and control capability, and the saving of lives.
- ❖ In an incident requiring damage assessment, such as an earthquake or flood, a *Damage Assessment Group (DAG)* may be organized under the *Operations Section*. This group should be lead by a *Group Supervisor* appointed by either the IC or Operations Chief and ideally being one of the Public Works Directors.
- ❖ The initial assessment should take place under the direction of the *Damage Assessment Group*, with assistance from the *Planning Section* as needed. Priorities in the second phase should be to estimate damages, restore public services and facilitate disaster assistance. The *Finance Section* may provide assistance in Phase II assessments (cost analysis, budgeting etc.) The County does not have the resources to restore private residences or businesses.

Initial Damage Assessment

- ❖ An aerial survey of the County should be performed as soon as possible after the incident. The results of this survey will facilitate further damage assessment on the ground. Local building officials should direct damage assessment on vital facilities according to their assigned Branch.
- ❖ The initial damage assessment should be augmented by "windshield" surveys and citizen reports, in order to provide an estimate of numbers of private homes and businesses affected.
- ❖ This survey should be completed as soon as possible, since it will provide the supporting documentation for a disaster declaration, and establish a base for the secondary assessment process.
- ❖ An assessment of damage to utilities, and evaluation of the immediate needs of the population, especially water and sanitation services, should be accomplished as soon as possible.
- ❖ Potable water is a major concern following some emergencies. Power and gas for heating may also be extremely important, depending upon the season.

Secondary Assessment

- ❖ The EOC Finance Section should begin gathering dollar figures associated with the damage to support requests for disaster declarations and assistance. Resources and facilities, which will be vital to the economic recovery of the County, should be surveyed. These include all hospitals, schools, financial institutions, and major employers. Some buildings or structures may require further engineering evaluation, to be performed by a consultant hired by the owner.

Aerial Reconnaissance

- ❖ The Civil Air Patrol, MTDNRC, MT Highway Patrol and a number of public and private resources may be utilized. This includes fixed wing and helicopter.

Debris Removal

- ❖ Removal of debris from public roads/highways is the responsibility of the agency that is responsible for its maintenance. Care should be taken to ensure that debris removal efforts are coordinated with other agencies

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that may have an associated responsibility. Removal of debris from private property is the responsibility of the property owner. (see [Debris Management Annex](#))

3.2 Notifications

- ❖ The Coordinating Agency representative should notify Cooperating Agency representatives as appropriate of EOC activations and request that representatives report to the EOC to coordinate Damage Assessment support activities. This is typically accomplished by radio broadcast, digital pager or telephone contact.

3.3 Preparedness

- ❖ Assess disaster risk to government facilities from likely hazards and take measures to reduce the vulnerability of facilities.
- ❖ Identify potential damage assessment team members.
- ❖ Regularly train personnel in damage assessment techniques. (See [Damage Assessment Manual](#))
- ❖ Maintain pre-disaster maps, photos, and other documents for damage assessment purposes. Develop techniques and technology that will allow this information to be accessible to the EOC in the case of disaster. Develop a system for designating evacuation routes as may be needed, following damage assessments.
- ❖ List critical facilities requiring priority repairs if damaged.
- ❖ Ensure that key local officials are familiar with jurisdiction's insurance coverage.
- ❖ Conduct public education on disaster preparedness.
- ❖ Conduct exercises.

3.4 Response

- ❖ Request DATs report to duty.
- ❖ DAG Supervisor brief assembled DATs on the situation, assignments, and other operating information necessary to conduct a rapid damage assessment of all buildings in a specified area.
- ❖ Conduct damage assessment and collect damage information using a prioritized system that focuses first on critical facilities. Photograph damage, when appropriate.
- ❖ Place barricades and warning signs around damaged public works facilities.
- ❖ Compile damage assessment [forms](#) and reports in the EOC.
- ❖ Complete disaster summary outline.
- ❖ Keep State DES informed of damage reports.

3.5 Recovery

- ❖ Identify unsafe structures and recommend condemnation. Accompany state and federal damage assessment teams to complete Damage Survey Reports (DSRs).
- ❖ Monitor destruction and/or restoration activities. Repair facilities according to their importance to the community.
- ❖ Communicate effectively with disaster victims.
- ❖ Review building codes and land use regulations for possible improvements.
- ❖ Submit DSRs to DES and FEMA.
- ❖ Participate in post-disaster briefings.
- ❖ Revise plans accordingly.

3.6 Mitigation

- ❖ Develop and enforce adequate building codes.
- ❖ Develop and enforce adequate land use regulations.
- ❖ Develop hazard analysis.
- ❖ Develop potential mitigation measure to address the hazards identified in the analysis

4.0 Organization & Responsibilities

4.1 Organization

As mentioned in other annexes, the Incident Command System (ICS) should be used both on scene and in the EOC to organize and manage staff during large-scale incidents in Lewis & Clark County.

4.2 Responsibilities

The following responsibilities should be clearly outlined in agency guides and internal documents:

Chief Elected Officials

- ❖ Declare an emergency and/or a disaster with up to a 2-mill levy, if appropriate. Separate declarations are required for each affected jurisdiction (county, Helena, East Helena.) A disaster declaration will allow a request to the MTDES for assistance.
- ❖ Notify those officials or any other county agencies whose assistance may be required to assist in the damage assessment process.
- ❖ Initiate a review of building codes, land-use regulations, and a reassessment of the disaster-affected tax base after a major disaster.
- ❖ Provide Public Information as appropriate.

Building Departments

- ❖ Provides damage assessment teams (DAT) in support of the ARC.
- ❖ Accomplishes “Individual Assistance” damage assessment tasks to include cost estimates.
- ❖ Maintains coordination with EOC.

DES Coordinator (DESC)

- ❖ Maintain this annex, through coordination with other departments and agencies.
- ❖ Responsible for the emergency management program and organization and provides overall direction in the development of emergency mitigation, preparedness, response and recovery programs.
- ❖ Arrange for training of personnel in disaster damage assessment and maintain a list of qualified local individuals.
- ❖ Alerts Damage Assessment Teams (DAT) to perform an initial (windshield) survey of damages to buildings, streets, roads, bridges, and other critical facilities.
- ❖ Manage the EOC, advise the CEO’s and support field operations.
- ❖ Provide public information if the PIO is not available.
- ❖ Ensure that damage assessment and major events are being recorded.
- ❖ Hold periodic briefings when necessary for the EOC staff to exchange information.
- ❖ Notifies appropriate government agencies and private sector organizations when damage assessment procedures are to be initiated.

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- ❖ Coordinates information requests from County, State or Federal authorities.

Emergency Operations Center (EOC):

- ❖ The EOC should receive all damage assessment reports from the field. This information should be passed to the Planning Section's Situation Unit for consolidation.
- ❖ A situation map may be maintained by the Planning Section in the EOC to illustrate the affected areas and any other pertinent information such as fires, flooding, impassable roads and alternate response routes. *(Release of specific damage assessment information to private appraisers, insurance adjusters, and others may need the approval of local authorities (CEOs)).*
- ❖ The Logistics Section provides the necessary logistical support to damage assessment personnel during emergency operations.

Extension Agent (County)

- ❖ Provides the EOC with reports concerning the extent and estimated costs of damage to crops, soils, livestock, farm buildings, machinery, and equipment.

Fire Services:

- ❖ City and county fire departments fight fires, rescue victims, respond to hazardous materials incidents, provide emergency medical services, assist law enforcement with evacuation and assess damage as observed. Damage reports should be reported to the EOC for collection and assessment.

Law Enforcement:

- ❖ Determines, as rapidly and accurately as possible, the number of citizens deceased, injured, or missing as a result of the emergency or disaster, and submits this information and updates to the EOC and Coroner.

Public Health

- ❖ Gather information concerning injuries and their severity, and of fatalities resulting from disasters. This information is forwarded to the EOC as soon as it is available.
- ❖ In cooperation with public works departments, evaluate damage to water treatment and sewer facilities following a disaster.
- ❖ Evaluate reports of damage sustained by medical facilities in a disaster area. Support in this area should be provided by the individual medical facilities. Each medical facility administrator, or designee, should gather initial damage assessments and identify which patients must be removed pending repairs to the facilities. The data should be forwarded to the EOC.
- ❖ Conduct damage assessment in licensed food facilities for contamination and refrigeration failures.

Public Works

- ❖ Conduct a windshield damage survey within the first 24 hours and more intensive assessments as able. Damage assessments should be reported to the EOC.
- ❖ In coordination with DAG, provides engineering or other special assistance required by the DATs.
- ❖ Provides dollar estimates for necessary debris clearance, traffic engineering, and protective measures as able *(engineering items only, not fire, rescue or police costs)*.
- ❖ Coordinates restoration of basic services. Repairs to streets and bridges should be made in order of priority. Provides dollar estimates for restoration of these services.
- ❖ Identifies areas in the County that are isolated as a result of bridge or roadway damage; exchanges such data with the MDT.
- ❖ Provides a cost estimate for damaged or destroyed facilities, bridges and roadways, estimates the impact of the loss of such transportation assets.
- ❖ City Public Works should coordinate with the Building Division to inspect priority buildings first, which are essential service, hospitals, nursing homes, and shelters. Damage assessment should be reported to the EOC.

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Superintendent of Schools (County)

- ❖ Determines the extent and estimated cost to repair damaged public and private schools. Including the total amount of insured and uninsured damage, and proves the data to the EOC.
- ❖ Provides estimates of the impact of damage on the operation of public and private schools within the county; includes projected dates for opening closed schools.

Utility Companies

- ❖ Provide damage assessment information and estimated utility recovery times to the EOC.

Montana Disaster & Emergency Services (DES)

- ❖ Coordinate assistance to local government and mobilization of resources per the provisions of the [Montana Emergency Response Framework](#).

Federal Emergency Management Agency (FEMA)

- ❖ Administers assistance to the state pursuant to [PL 93-288 of the Disaster Relief Act of 1974, Section 417](#).

5.0 Authorities and References

5.1 Authorities

- ❖ See [Section 5.1](#) of *Basic Plan*.
- ❖ **Directive 51/Homeland Security Presidential Directive 20. *National Continuity Policy*. May 9, 2007.**

5.2 References

- ❖ See [Section 5.2](#) of *Basic Plan*.
- ❖ **Lewis and Clark County, Montana. November, 2005. Annex J: Damage Assessment.**
- ❖ **City of Roanoke, Virginia. September, 2007. Damage Assessment Support Annex.**
- ❖ **Target Capabilities List. September 2007. Structural Damage Assessment.**

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Attachment 1: Acronyms

Acronym	Meaning
ARC	American Red Cross
ARES	Amateur Radio Emergency Services
CAP	Civil Air Patrol
CBO	Community Based Organization
CCRC	Capitol City Radio Club
CEO	Chief Executive Officer (<i>also Chief Elected Official</i>)
CERT	Community Emergency Response Team
CIP	Critical Infrastructure Protection
DAG	Damage Assessment Group
DAT	Damage Assessment Team
DES	Disaster And Emergency Services
DESC	DES Coordinator
DNRC	Dept. of Natural Resources & Conservation (Montana)
DPHHS	Dept. of Public Health & Human Services
DSR	Damage Survey Report
EOC	Emergency Operations Center
ESF	Emergency Support Function
FBO	Faith Based Organization
FEMA	Federal Emergency Management Agency
HAZMAT	Hazardous Material
IC	Incident Commander
ICS	Incident Command System
LCCO	Lewis & Clark County
MDT	Montana Department of Transportation
MHP	Montana Highway Patrol
MTDES	Montana Disaster & Emergency Services
NGO	Non Governmental Organization
PIO	Public Information Officer
SOP/SOG	Standard Operating Procedures/Guidelines

Attachment 2: Definitions

Critical Infrastructure – An interdependent network of vital physical and information facilities, networks, and assets, including in the telecommunications, energy, financial services, water, and transportation sectors, that private business and the Government rely upon. Critical infrastructures are those systems and assets so vital to the Nation that their incapacity or destruction would have a debilitating impact on national security (including national economic security) and/or national public health or safety.

Critical Infrastructure Protection (CIP) – Risk management actions intended to prevent a threat or threat agent from attempting to, or succeeding at, destroying or incapacitating critical infrastructures.

Facilities – Locations where an organization's leadership and staff operate. Leadership and staff may be co-located in one facility or dispersed across many locations and connected by communications systems. Facilities should be able to provide staff with survivable protection and should enable continued and endurable operations.

Individual Assistance. Financial or housing assistance provided to citizens or businesses who suffer losses in a disaster. The housing assistance is only for citizens.

Interagency Agreements – A written agreement entered into between agencies that require specific goods or services to be furnished or tasks to be accomplished by one agency in support of the other.

Public Assistance. Financial assistance to repair facilities and infrastructure provided to governments, public institutions, and certain private non-profit agencies that provide essential services of a governmental nature.

Recovery – The implementation of prioritized actions required to return an organization's processes and support functions to operational stability following an interruption or disaster.

Risk Analysis – The process by which risks are identified and evaluated.

Risk Assessment – The identification and assessment of hazards.

Risk Management – The process of identifying, controlling, and minimizing the impact of events whose consequences are or may be unknown, or events that are themselves fraught with uncertainty.

Vulnerability Analysis – A process that defines, identifies, and classifies the susceptibility of a facility, computer, network, or communications infrastructure, to damage or destruction. In addition, a vulnerability analysis can forecast the effectiveness of proposed countermeasures and can evaluate their actual effectiveness after they are implemented.

Attachment 3: Critical Facilities For Inspection And Repair

Buildings

1. Law Enforcement Center, (EOC) 221 Breckenridge
2. Helena Fire Departments: 300 Neill and 650 N. Hannaford
3. Fire departments in the Helena Valley
4. St. Peter's Hospital, 2475 Broadway
5. Helena Regional Airport Terminal and Police sub-station, 2850 Skyway Dr.
6. City-County Building, 315 N. Park
7. Cooney Home, 2555 Broadway
8. Big Sky Care Center, 2475 Winne
9. Helena Nursing Home, 25 S. Ewing
10. Qwest, 441 S. Park
11. Northwestern Energy, 1315 N. Main
12. The Gateway Center and other buildings required for shelters
13. Masonic Home, 2010 Masonic Home Dr.
14. Rossiter School, 1497 Sierra Rd. E.
15. Warren School, 2690 York Road
16. Darcy School, 990 Lincoln Rd. W.
17. Kessler School, 4222 Hwy. 12 W.

State buildings should be assessed by the Building Codes Division.

Water Supplies

1. Waste Water Treatment Plant, 1708 Custer
2. Water Treatment Plant, 2560 Canyon Ferry Road
3. Ten-Mile Water Treatment Plant, Hwy. 12 W. and Rimini Road
4. Hale, Woolstein, and Malbin Water Reservoirs in Helena
5. Chessman and Scott Reservoirs above Rimini.

HazMat Storage Sites

1. Great Western Chemical Co., 2000 Boulder
2. Columbia Chemical Co., 1500 N. Montana
3. Northern Energy, 2200 Airport Road
4. Allen Oil Co., 1300 Phoenix
5. Decorative Industrial Plating, 2531 Dodge
6. Conoco and Exxon Bulk Plants, Hwy 12 E.

East Helena

1. Sewage Treatment Plant, Valley Dr.
2. City Hall, 306 E. Main St.
3. Water System, Valley Drive
4. American Chemet
5. Radley School, 226 Clinton
6. Eastgate School, Lewis and Lake Helena Dr.
7. East Valley Middle School, 400 N. Kalispell

Public building and residences should be inspected following the survey of essential buildings and facilities.